

MINUTES OF MEETING

CALFED Water Quality Technical Group

October 1, 1997

Energy Commission Building, Hearing Room A

Water Quality Technical Group: Russ Grimes, Nigel Quin, M. Alamo, Bill Crooks, Stephen Merrill, K.T. Shum, Bryan Stuart, Dennis Westcot, Francis Chung, Chris Foe, Lynda Smith, John Winther, Kati Buehler, Gary Ichikawa, Mark Stephan, Raymond Tom, Bill Jennings, C.H. Smith, John Coburn, John Sanders, Douglas Morrison, G. Fred Lee, Ted Roefs, Steve Herrera, Roy Wolfe, Leo Winternitz, Marguerite Young, Tom Zuckerman, Tom Maurer, Bruce Macler, Mike Majeski, Jane Vorpapel, Neil Dubrovsky, Lenore R. Thomas, Bob Seyfried, Earl Byron, Inge Werner, Carl Gzcheske, Elaine Archibald, Bob Berger, Deborah Condon, Peter Mangarella, Peter Standish-Lee.

CALFED Team: Rick Woodard, Judy Heath, Sarah Holmgren, Tanya Matson, Dale Flowers

Meeting Format

The meeting was divided into four parts: the program status, the status of the water quality action strategies, water quality concerns associated with MTBE, and the Comprehensive Monitoring, Assessment and Research Program.

Program Status - Rick Woodard

Rick began the meeting by introducing Leo Winternitz of the Department of Water Resources, who will be working half-time in the Water Quality Program. Rick also explained the program status and project proposals. It was explained that the purpose of inviting WQTG members to submit project concepts earlier in the year was to enable CALFED to put together a Request for Proposals that would be sufficiently broad to accommodate all needed water quality projects to be done under Category III funding.

In regard to the Water Quality Component Report, comments are still being collected, and are being incorporated into the affected environment and impact analysis reports. These two documents will be combined to form the Water Quality Appendix of the Programmatic EIR/EIS. Also, comments continue to be collected and incorporated in the affected environment and impact analysis documents. The combined affected environment and impact analysis documents should be ready for internal CALFED review by November. Although there are some legalities involved, we would like to provide the WQTG with the combined report as soon as possible, with the provision that it would be provided for technical comment only, and must remain internal to the technical group. The Draft Programmatic EIR/EIS is scheduled for release in January 1998.

Category III Evaluation and Selection Process - Kate Hansel

Kate Hansel discussed the evaluation and selection process under Category III. Category III is part of the Bay-Delta Accord which was in existence prior to CALFED. There are two main functions: administering Category III projects and coordinating with CALFED and other funding sources. The RFP evaluation and selection process is two tiered. In the first step, project proposals are reviewed by 13 technical review panels to be scored according to Category III criteria. The second step is submission of the technical panel recommendations to the Integration Panel which characterizes and balances the proposals. Proposals have been categorized in a variety of ways. Project types were separated into categories such as research, monitoring, assessment, education, and water quality. Those project types which included more than one category were categorized by determining where the bulk of the funding would go. During the month of November the pool of proposals will be presented to the Ecosystem Restoration Round Table for review. The Ecosystem Restoration Round Table will provide its input and the pool of proposals will then be reviewed by CALFED Management and forwarded to the Policy Group for approval. The next funding cycle is expected to begin in March, 1998. That funding cycle will include some RFPs and some directed projects. Directed projects will be undertaken if no proposals are submitted in areas which need to be addressed through the CALFED program. Directed projects will also be reviewed by the Ecosystem Restoration Round Table.

Status of the Water Quality Action Strategies - Sarah Holmgren

Sarah began by discussing the reports generated to date and the overall time line.

The purpose of the action strategies is to provide good water quality for beneficial uses and address the seven major topic areas. Beneficial use issues include drinking water, agriculture, recreation, industry and environment. The seven major topic areas for actions include mine drainage, urban and industrial runoff, wastewater and industrial discharge, agricultural drainage, water treatment, toxicity of unknown origin, and water management. Within these topics areas there are a total of 24 action strategies.

The process to assess action effectiveness has been a controversial subject. At this point, the tools to assess action effectiveness are still being identified. The Potential Tools and Indicators of Success for Assessing Effectiveness of CALFED Water Quality Actions handout is still in rough form and comments and insight from the WQTG would be appreciated. The water quality concentrations were developed through consensus but may be changed in response to new information. The California Toxics Rule is scheduled to become effective in mid-November but some requests have been made for an extension. A copy of the rule is available on the EPA's website (<http://www.epa.gov/owow>) or call Diane Frankel at 415-744-2004.

Issues Raised:

A question arose as to the origin of the water quality Parameters of Concern and water quality targets. The developmental process involved all the stakeholders, agencies, and other interested parties. Originally, they were formed into three groups of experts in ecosystem, agricultural, and

municipal water quality. These groups identified water quality targets. The water quality targets were consistent with basin standards. If there were no basin standards, EPA 304(a) standards were used. If there were no EPA 304(a) standards then the best suitable standards were used, according to the professional judgement of the participants.

Water Quality Concerns Associated with MTBE - Mike Majeski

Mike explained that MTBE was initially used to phase out lead fuel because it provides octane enhancement. In 1990, MTBE was required to be used in fuels as a fuel oxygenate which would address air quality concerns. MTBE is a volatile organic chemical in the Alkyl Ether Oxygenates family of chemicals. MTBE is mobile, persistent, it is highly water soluble, and it is a suspected human carcinogen. In light of its solubility in water, MTBE can move through the hydrologic cycle unchanged. It can degrade into TBF which is toxic and can remain in the environment for thousands of years. A few point sources of release of MTBEs include production and distribution, land surface spills, and landfills and Superfund sites.

If MTBE is released into the lower atmosphere, it can go into the higher atmosphere or be deposited in surface water. Fuel oxygenates partition between water and air; however, MTBE has a strong tendency to partition into water. Once deposited in surface water, it can migrate to deeper groundwater. MTBE's half life in a regional watershed is approximately 3 days but it tends to remain longer in cooler temperatures and deeper waters. Once MTBE reaches surface waters, there is little sorption into bed sediments, little bioaccumulation, and little abiotic degradation. At this point, MTBE can volatilize back into the atmosphere. The rate at which this happens is site-specific and dependent upon water depth, velocity, temperature and wind speed.

The USGS is currently monitoring municipal storm water runoff and small urban streams for MTBE. In municipal storm water, MTBE was the seventh most frequently detected VOC and its detection varied seasonally. In a small urban stream, MTBE was the fourth most frequently detected VOC. When fuel oxygenates are introduced to groundwater, they may be volatilized into the unsaturated zone and undergo biooxidation. MTBE has been detected in ambient groundwater in 20 out of the 41 states monitored by the USGS. MTBE is the second most frequently detected VOC in shallow monitoring wells in 13 metropolitan U.S. cities. There is a high concentration of releases to surface water and ground water and lower concentration in storm water runoff and in lakes. In drinking water, all concentrations found have been less than EPA human health criteria. For aquatic life, concentrations have also been less than EPA toxicity values. Overall, there is little knowledge concerning MTBE and more studies are needed.

Issues Raised:

MTBE levels are expected to rise in light of its persistence.

The detectable level of MTBE is .2 $\mu\text{g/l}$. Data on MTBE in Delta water is not available.

Comprehensive Monitoring, Assessment and Research Program - Judy Heath

Judy began by indicating that the framework for CMARP was handed out at the last WQTG meeting. Any comments on the framework are encouraged and would be helpful. CMARP was developed to ensure projects are quantifiable and the data received can be used in the decision making process. The components of CMARP are water quality, levee and channels, ecosystem restoration, water use efficiency, and storage and conveyance. The CMARP is the primary instrument of adaptive management, and will enable CALFED actions to be evaluated and modified as necessary to be more effective.

The CMARP is intended to coordinate and expand upon existing monitoring programs in order to enhance and optimize resources. The plan development process will include broad-based stakeholder input, both in the program's formulation and in its implementation. Technical advisory groups will be established, and there will be public meetings and workshops to gather input.

Leo Winternitz shared some thoughts on CMARP and Category III proposals. Every proposal should have some monitoring aspect, however, some of the proposals are research only. Data will need to be coordinated into one database and made available to the public. There are some possible databases that could be used to make available all data from the research and monitoring. The IEP home page is an example of how Category III data could be input and made available. Once a common database is established, work groups could be formed to evaluate data and determine if projects have been successful. Since there are two main types of proposals, restoration and structure, there could be a work group for each. For the sake of practicality, the work groups should not be too large.

Issues Raised:

Concern was expressed on the rate at which the plan will be developed, as compared to the need for implementing the program for Category III projects. It would be ideal for the CMARP program to be fully developed before being implemented; however, it is a monumental task which is probably best accomplished in layers, as a quality control structure is needed immediately for monitoring activities required as part of the Category III projects.

In light of the fact that CALFED cannot itself implement all that is needed, good coordination among the activities of others is essential. Standards need to be set to ensure work is being accomplished that meshes with the CALFED program. In terms of implementation, the world wide web provides valuable technology for being able to present data in different formats from many sources.

Rick Woodard also discussed CMARP and emphasized that everyone is encouraged to participate in its development.

Water quality fits into the three alternatives in that whichever becomes preferred has water quality actions. The entire package includes assurances and a finance package.

Mercury and Cache Creek in relation to CMARP: The exact problems associated with mercury and how those problems will be solved are not known. Studies will provide the necessary data.

Wrap Up

Rick Woodard discussed his position with the water quality program. CALFED management has asked him to participate directly in the process of developing the CALFED Preferred Alternative. CALFED has appointed a Core Group of CALFED staff to help organize the effort. Rick will chair this group. The Core Group, together with selected CALFED agency staff comprise the Interagency Development Team (IDT) which will perform much of the analytical work associated with selecting the Draft Preferred Alternative. The IDT reports to the CALFED Management Team, which consists of middle management representatives of the CALFED agencies, and to the Policy Group, which is the CALFED decision making authority. The IDT will also work with the Bay Delta Advisory Council, the official group of citizen advisors to the program.

The process is to narrow the existing 12 CALFED alternatives to three, which would be optimal implementations of each of the three basic CALFED alternatives identified in Phase I of the program: No or minor physical changes in the Delta system; through-Delta conveyance improvements; and, a dual through-Delta and isolated facility alternative. From these, a Draft Preferred Alternative will be developed which may include features of the three optimized alternatives.

Rick will continue to be involved in the water quality program but will necessarily be less available than has been the case. He will be relying heavily on Judy Heath and Leo Winternitz. For the time being, Leo will focus primarily on CMARP and Judy will have responsibility for other aspects of the CALFED Water Quality Program. Please contact them directly if you have any questions.

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